

Abstract

Apparatus and methods for providing simultaneous positive pressure ventilation to a patient together with introduction of medical device shafts into the trachea, esophagus, and/or nasal cavity of a patient. A face mask according to present invention can be used to provide positive pressure ventilation and delivery of general anesthesia gas while maintaining an airtight seal about the face, simultaneous with the introduction of a medical device shaft, for example, a fiber optic laryngoscope, into the trachea of a patient. The mask can include a standard breathing circuit port and a second instrument port having a controllably variable or adjustable inside diameter for providing a tight seal about the inserted medical device shaft. One mask has an inflatable and deflatable cuff disposed within the inside tubular walls of the instrument port. The mask may be used in a difficult airway situation, to provide positive pressure ventilation and general anesthesia gas to a critically injured patient, allowing an anesthesiologist to identify the trachea with a fiber optic laryngoscope, and advance an endotracheal breathing tube over the fiber optic laryngoscope, while maintaining an airtight seal between the controllably variable inside diameter instrument port and the inserted medical device shafts. The instrument port may later be opened or dilated to allow the mask to be passed over the proximal end of the endotracheal tube, requiring only brief interruption in positive pressure ventilation.